

BOOK REVIEW

Mehdi Golshani, *Issues in Islam and Science* (Tehran: Institute for Humanities and Cultural Studies, 2004), pp 152, HB, ISBN 964 4226 207 7

The current slow output of writing on Islam and science does not seem to match the growing demand. Every new addition to the still relatively small corpus on the subject is thus greeted with much interest. Mehdi Golshani's latest book on religion and science, *Issues in Islam and Science*, is a compilation of articles that he has published in different international journals during the last five years. Though the content is not new, the author, a professor of physics at the Sharif University of Technology in Tehran, Iran decided to publish the articles in book form. This will certainly help his earlier writings to reach a wider audience in the English-speaking world beyond the regular readers of those journals. Hopefully the book would lead readers to a critical discussion of its content that would further enhance intellectual interest on the subject of Islam and science.

The book consists of six chapters dealing with different but related themes pertaining to the relationships between Islam and science. The major themes treated in these chapters may be summarized as follows. Chapter 1 is entitled "Islam and the Sciences of Nature: Some Fundamental Questions." Its central theme is the confrontation between Islam and modern views on the meaning and significance of science for the human understanding of reality in its totality and the human quest of God. The author first presents the Qur'anic perspective on science and its relationship with religion, then contrasts it with the materialist and empiricist perspectives, and simultaneously cites modern western voices from the scientific community supportive of the Qur'anic position. In trying to emphasize the multi-faceted relationship between religion and science in the Islamic context Golshani has listed many issues for discussion. These include the implications of religious faith for scientific pursuit, the multiplicity of methodological approaches to

the study of nature, the limitations of science in revealing the total picture of the universe, and the controversial notion of “Islamic science.”

Golshani contends religious faith and scientific pursuit stand to derive mutual benefit from their encounters (pp. 11-12). Coming from a man of deep religious faith as well as a practicing scientist we can expect the claim will receive a more respectable consideration from readers than if the claim were to come from a non-scientist. I suspect readers are eager to be furnished with a good range of examples of what these “mutual benefits” are. In particular, readers may wish to know the positive consequences of religious faith for scientific pursuit especially as individually or collectively experienced by scientists with religious beliefs. Unfortunately, he is content with saying that “if a scientist approaches nature with a faith in God, his faith may be fortified by his scientific activity” without clarifying why and how scientific activity has the capacity to transform one’s religious faith. An explanation is needed even in the case of someone who already possesses a “certain amount” of religious faith. Faith has many dimensions. As Prophet Muhammad, peace be upon him, tells us, the tree of faith (*īmān*) has seventy branches some of which pertain directly to knowledge and virtues. Not all religious people who talk about faith in God are passionate about science. Then we have men of science, who talk about religious faith, but they do so rather differently from the way many theologians and jurists usually approach the subject. These scientists tend to speak of faith more in terms of knowledge than of rituals or worship. Their faith thus appears suspect to some people. In linking scientific activity to faith in a positively creative way the author could have made his position much clearer by arguing that his main interest is in that dimension of faith most relevant to science, as Islam in fact requires. Islam asserts that faith has an epistemological content. In talking about the possible impact of science on faith, it is this epistemological content that needs to be explored. In other words, we wish to know how scientific activity can fortify the epistemological content of one’s faith. It is only in the final chapter VI entitled “Does science offer evidence of a transcendental reality and purpose?” that Golshani offers us a more detailed treatment of the epistemological and cosmological content of faith.

Conversely, Golshani maintains “religious faith can provide a good motivation for scientific work.” In support of this very

important claim he quotes the eleventh-century Muslim scientist-philosopher, al-Bīrūnī, and the twentieth-century author of *The Social Structure of Islam*, Reuben Levy, both of whom acknowledge the centrality of religion in the Muslim motives for the study of the universe. Many contemporary westerners do not hesitate to reject Golshani's claim, but Muslims generally agree fully with that claim. There are plenty of supportive facts that may be cited from the world history of science in general and the Islamic history of science. Given the fact that in the West there is widespread ignorance of Muslim cultivation of science in their past history it is a good thing for Golshani to stress the point that religious faith can have a very positive influence on scientific work. In the same final chapter he provides a brief discussion of the scientific fruits of religious faith such as experienced by al-Bīrūnī and the seventeenth-century English scientist Robert Boyle (pp. 135-136). Unfortunately Golshani's discussion on this very important subject is too brief. Readers need a wider and deeper understanding of the wide range of "scientific manifestations" of religious faith both at the levels of ideas and practices.

Chapter II is devoted to the multiplicity of methodological approaches to the study of nature. Entitled "Ways of understanding nature in the Qur'ānic perspective", this nine page chapter is too brief for such an important subject. By quoting the relevant verses from the Qur'ān Golshani wants to show that insofar as Muslims are guided by the sacred book they believe in three fundamental avenues to knowledge of nature. These are the use of the immediate senses by means of which observation and experimentation take place, the use of intellect-reason, and divine revelation and inspiration. For those who are not yet familiar with Islamic teachings on the possible sources of human knowledge this chapter provides useful introductory material to the subject. But serious students of Islamic philosophy of science would like to see a more in-depth discussion of these channels to knowledge of nature and their interrelations.

In chapter III entitled "How to make sense of 'Islamic science'?" Golshani attempts to rationalize the widespread usage of the term 'Islamic science' in contemporary Muslim societies. On the history of the idea of Islamic science there appear to be some inconsistencies in the book. In chapter I (p. 24) Golshani writes "The idea of Islamic science has been around for the last thirty years." In chapter III he

claims the history of 'Islamization of knowledge' and 'Islamic science' may be traced as far back as the 1930's with the writings of Sayyid Abu'l 'Alā Mawdūdī (d. 1979), founder of the modernist Salafi movement in the Indian subcontinent, the *Jama'at al-Islamī* (p. 45). This is a controversial claim. Not a few people would like to dispute the claim. The Malaysian scholar, Syed Muhammad Naquib al-Attas, a major figure in contemporary Islamization of knowledge discourse has maintained he was the first to have explicitly formulated the idea of Islamization of knowledge. As far as the term 'Islamic science' is concerned it was only in vogue after it was introduced in the early 1960's by the Iranian-American scholar of Islam, Seyyed Hossein Nasr. Golshani's quotations of Mawdūdī do indicate the latter had used the term 'Islamized' in reference to the problem of Muslim encounter with 'foreign' knowledge, thus implicitly affirming the need for an Islamization of knowledge for today's Muslims. However, there is no evidence to show he has ever used the terms 'Islamization of knowledge' and 'Islamic science.' In any case, Golshani's discussion of Islamic science has raised the academic issue of the origins of the two terminologies in modern Muslim scholarship, though no one has yet come up with a detailed historical account of the origin and development of the two related ideas in question. We hope such an account will be written in the very near future.

Golshani is aware of the different understandings of the term 'Islamic science' among Muslims, but he avoids discussing them. He affirmatively answers the question "does the idea of Islamic science make sense?" As a matter of fact, he devotes several pages to discussing the rationale for the idea and his own understanding of the term. In chapter I (pp. 25-28) and this chapter (p. 51) he has given two different sets of characteristics of Islamic science. Though different, these characteristics appear to be reconcilable. Golshani also discusses what Islamic science is not. But of all the issues pertaining to Islamic science that he has raised in the chapter, the question of the relationship between science and metaphysics gains his most serious attention. Clearly he considers the acceptance of metaphysics as crucial and as the key to defending the idea of Islamic science and, more generally, the idea of religious science. In discussing the issue he has put to the best use his sound knowledge of modern physics. If the book has made some contribution to the contemporary discourse on Islamic science, then it is precisely in his

strengthening of the argument that “science is not free of metaphysical presuppositions”, and we have the choice of doing science either in a religious or non-religious context.

Chapter IV, another brief one with the title “Islam, science, and society” is supposed to deal with the societal dimension of science from the Islamic point of view. Within the short space given to this very important subject Golshani has dealt mainly with the Islamic view of society. The various aspects of the relationship between science and society are hardly discussed. A more substantive treatment of the subject is to be found in the next chapter (V) entitled “Values and ethical issues in science and technology.” It is therefore rather surprising the author did not combine the two chapters into one. His attempt to explain why moral and ethical values in scientific and technological activities in the modern world of the last one century or so is commendable. But instead of offering a philosophical and historical treatment of the problem he presents quotations from Western philosophers and scientists that he thinks would help to answer the above question. Golshani does address the question of the urgent need for ethical concern in science and technology especially in light of recent advances such as in the domain of genetic manipulation and environmental degradation. He also stresses the important point that science needs religion in the domain of its practical applications in as much as it needs religion in its theoretical constructions. For western readers not familiar with Islamic ethics the author has provided a good list of verses from the Qur’ān that are relevant to an understanding of Islamic ethics in science and technology.

The last and final chapter of the book again takes up the issue of the meaning and significance of a metaphysical framework for science. It asks this fundamental question: Does science offer evidence of a transcendental reality and purpose? After presenting views for and against a teleological explanation of the universe Golshani concludes by saying “there are some clues to the teleological aspects of our universe in modern science.” He gives the example of “anthropic principle” which may be interpreted to mean “God planned the universe with human beings in mind” (p. 132). On the question of the existence of God the author maintains “science can at most inform us of some attributes of God, such as knowledge, power... but it cannot lead us to an Omniscient, Omnipotent God, which the Holy Koran is talking about.” In his view, our knowledge

based on a limited study of the universe can only lead us to the idea of an eternal, transcendent God with the help of revelation and intellectual intuition. On the theory of evolution, he is taking the controversial stand that the theory may be interpreted so as to be compatible with Muslim conception of God (pp. 143-45). To strengthen his view he enlists the support of the twentieth century Muslim scholar from Iran, Abū'l-Majd Muḥammad Riḍā al-Najafī al-Iṣfahānī, who insists the theory of evolution is not against theism. This chapter could be considered the most well written part of the book. The author concludes well by saying "if empirical science is augmented by underlying metaphysical framework that can accommodate all levels of knowledge and domains of human experience, then we expect the science to become a ladder that can elevate one to the frontier of the physical and metaphysical" (p. 147).

The main drawback of the book is that it is repetitive on a number of issues and contains several inconsistencies. This has probably occurred because the chapters have been published at different times over a period of years and no proper editorial work was done to address this fact. On a number of very important issues the book's treatment of them is too brief. However, the book does contain new insights and makes appropriate emphasis on several issues that are important to contemporary Muslim discourse on Islamic science. The book is also especially helpful to new students of Islamic science with its compilation of Qur'ānic verses relevant to the subject and the views of Western scholars supportive of the need for a religiously oriented science such as Islamic science.

Osman Bakar
Georgetown University,
Washington DC, USA